BRUHAT BANGLORE MAHANAGARA PALIKE

DASARAHALLI-ZONE

T.DASARAHALLI-SUB-DIVISION.

Maintenance & Repairs of Borewell in Sidedahalli Village of Bagalagunte Ward No 14

EST.COST:35.00 Lakhs

ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ ಕಛೇರಿ

ಟಿ.ದಾಸರಹಳ್ಳಿ ಉಪ-ವಿಭಾಗ, ದಾಸರಹಳ್ಳಿ ವಲಯ, ಬಾಗಲಗುಂಟೆ, ಮಾರಮ್ಮ ದೇವಿ ದೇವಸ್ಥಾನದ ಹತ್ತಿರ

ಅಂದಾಜುಪಟ್ಟಿಯೊಂದಿಗಿನ ವರದಿ

ಕಾಮಗಾರಿಯ ಹೆಸರು:	Maintenance and Repairs of Borewell in Bagalagunte Ward No 14
ಲೆಕ್ಕ ಶೀರ್ಷಿಕೆ	2021-22ನೇ ಸಾಲಿನ ಬಿಬಿಎಂಪಿ ಪಿ.ಕೋಡ್-1771, POW

ಟಿ.ದಾಸರಹಳ್ಳಿ ಉಪ-ವಿಭಾಗ, ಬಾಗಲಗುಂಟೆ ವಾರ್ಡ್ ನಂ.14ರ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ 2021-22ನೇ ಸಾಲಿನ ಪಾಲಿಕೆ ಆಯವ್ಯಯದ ಪಿ-1771 ಲೆಕ್ಕಶೀರ್ಷಿಕೆ ಅಡಿಯಲ್ಲಿ ಮೇಲಿನ ಕಾಮಗಾರಿಯ ಜಾಬ್‌ಕೋಡ್ ಸಂಖ್ಯೆ.014-21-000020 ರಲ್ಲಿ ರೂ.35.00 ಲಕ್ಷಗಳಿಗೆ ಅನುಮೋದನೆಗೊಂಡಿರುತ್ತದೆ. ಬಿಬಿಎಂಪಿ ಬಾಗಲಗುಂಟೆ ವಾರ್ಡ್ ನಂ.14ರ ವ್ಯಾಪ್ತಿಗೆ ಹೊಸದಾಗಿ ಸೇರ್ಪಡೆಯಾಗಿರುವ 110 ಹಳ್ಳಿಗಳ ವ್ಯಾಪ್ತಿಗೆ ಸೇರಿದ್ದು, ಇದರ ವ್ಯಾಪ್ತಿಗೆ ಬರುವ ಸಿಡೇದಹಳ್ಳಿ, ಬಾಗಲಗುಂಟೆ ಹಳೆಗ್ರಾಮ ಇದ್ದು, ಈ ಕೆಳಕಂಡ ಬಡಾವಣೆಗಳಲ್ಲಿ ಬಿ.ಡಬ್ಲ್ಯೂ.ಎಸ್.ಎಸ್.ಬಿ ವತಿಯಿಂದ ನೀರು ಸರಬರಾಜು ವ್ಯವಸ್ಥೆ ಇಲ್ಲದ ಕಾರಣ ಸದರಿ ಬಡಾವಣೆಗಳಿಗೆ ಕೊಳವೆ ಬಾವಿ ಮೂಲಕ ನೀರು ಸರಬರಾಜು ಮಾಡಲಾಗುತ್ತಿದೆ.

ಮುಂದುವರೆದು ಈ ಕೆಳಕಂಡ ಬಡಾವಣೆಗಳಲ್ಲಿ ಕೊಳವೆ ಬಾವಿಯಲ್ಲಿ ಬೋರ್‌ವೆಲ್‌ಗಳು ಹಲವು ಬಾರಿ ದುರಸ್ಥಿಗೊಳ್ಳುತ್ತಿರುವುದರಿಂದ ಹಾಗೂ ಹೊಸದಾಗಿ ಬಡಾವಣೆಗಳು ಸೃಜನೆ ಆಗುತ್ತಿರುವುದರಿಂದ ಪೈಪ್‌ಲೈನ್ ಅಳವಡಿಸುವುದು ತುಂಬಾ ಅವಶ್ಯಕವಾಗಿರುತ್ತದೆ ಹಾಗೂ ಬಾಗಲಗುಂಟೆ ವಾರ್ಡ್ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಶುದ್ಧ ಕುಡಿಯುವ ನೀರಿನ ಘಟಕ ನಿರ್ಮಿಸುವುದು ತುಂಬಾ ಅವಶ್ಯಕವಾಗಿರುತ್ತದೆ ಆದ್ದರಿಂದ ಸದರಿ ಅನುದಾನಕ್ಕೆ 2019-20ನೇ ಸಾಲಿನ ಗ್ರಾಮೀಣ ಕುಡಿಯುವ ನೀರು ಮತ್ತು ನೈರ್ಮಲ್ಯ ಇಲಾಖೆಯ ದರಗಳ ಅನುಸಾರ ಈ ಕೆಳಕಂಡ ಅಂಶಗಳೊಂದಿಗೆ ಅಂದಾಜುಪಟ್ಟಿಯನ್ನು ರೂ.35.00 ಲಕ್ಷಗಳಿಗೆ ತಯಾರಿಸಲಾಗಿದೆ.

1. Supplying delivery of new control panel board
2. Providing pipeline work
3. Construction of R O Plant in 1.Manjunatha Nagara 2.Karekallu Bagalagunte

ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬಾಗಲಗುಂಟೆ, ವಾರ್ಡ್ ನಂ.14

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಟಿ.ದಾಸರಹಳ್ಳಿ ಉಪ-ವಿಭಾಗ

BRUHATH BENGALURU MAHANAGARA PALIKE DASARAHALLI ZONE

Name of work: Maintenance & Repairs of Borewell in Sidedahalli Village of Bagalagunte Ward No 14

	014-21-000020							Est .Cost Rs .35.00Lakhs	
Sl. No		Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
1	Earth work excavation for foundation of building water sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of colds complete as per specifications.(Page No. 5 / Item No. 2.3 of PWD SR 2018-19)								
	For Ro Plant								
	For SSM Wall								
	Side Wall		4	5.65	0.75	0.90	15.26		
			4	3.05	0.75	0.90	8.24		
			2	3.15	0.75	0.90	4.25		
	steps		2	5.65	0.75	0.90	7.63		
	Pole Bottoms		16	0.50	0.50	0.50	2.00		
	Flooring		2	5.65	3.20	0.20	7.23		
		Cum					**44.60**	**322.92**	**14402.88**
	Basic Rate	299.00							
	Area Weightage 8%	23.92							
	Total	**322.92**							
2	KSRB 4-1.2 : Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS (P.No. 13/ I.No. 4.2 of PWD 2018-19)							174 20.98	6442 6442 7086.2
	For Ro Plant								
	Side Walls		4	5.65	0.75	0.15	2.54		
			4	3.05	0.75	0.15	1.37		
			2	3.15	0.75	0.15	0.71		
	steps		2	5.65	0.75	0.15	1.27		
	Pole Bottoms		16	0.50	0.50	0.10	0.40		
	Flooring		2	5.50	2.90	0.10	3.19		
		Cum					**9.49**	**5873.09**	**55706.26**
	Basic Rate	5194.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-1079.39	Note:- (220*490.63/100)=1079.39						
	Add Cement cost as per Issue rate	1323.43	Note:- (220*300.78/50)=1323.43						
	Sub Total	**5438.05**							
	Area Weightage 8%	435.04							
	Total	**5873.09**							
3	Providing and constructing granite /trap/ baslat size stone masonry in foundation with cement mortar 1:6, stones hammerd dressed in courses not less than 20cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications (Page No. 25/ Item No. 5.6, PWD SR 2018-19)								
	For Ro Plant								
	Below Ground Level								
	1st Step								
	Room								
			4	5.65	0.75	0.40	6.78		
			4	3.05	0.75	0.40	3.66		
	2nd Step		2	3.15	0.60	0.40	1.51		
	Room								
			4	5.65	0.60	0.40	5.42		
	Entrance Steps		4	3.05	0.60	0.40	2.93		
	Above Ground Level		2	3.15	0.75	0.60	2.84		

Sl. No		Unit	No	Dimension L	B	D	Quantity	Rate in Rs.	Amount in Rs.
	1st Step								
	Room		4	5.65	0.45	0.40	4.07		
			4	3.05	0.45	0.40	2.20		
			2	3.15	0.45	0.40	1.13		
	Entrance Steps		6	5.80	0.45	0.20	3.13		
	Stage		2	5.80	0.90	0.20	2.09		
	Deductions								
	Pole Bottoms		-8	0.50	0.50	0.50	-1.00		
					Net Qty		**34.76**	**5023.58**	174604
		Cum							
	Basic Rate	4596.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-245.32	Note:- -(0.2*1*1=0.2 Cum/Sqm) (0.2*250*490.63/100)=245.32						
	Add Cement cost as per Issue rate	300.78	Note:- (0.2*250*300.78/50)=300.78						
	Sub Total	**4651.47**							
	Area Weightage 8%	372.12							
	Total	**5023.58**							
4	Providing ruled pointing to coursed stone masonry with cement mortar 1:3 20mm deep, after raking joints to depth of 20mm necely lining, including cost of materials, labour, curing complete as per specifications (Page No. 115 / Item No. 15.3, PWD SR 2018-19)								
	For Ro Plant								
	Above Ground Level								
	1st Step								
	Room		4	5.65		0.40	9.04		
			4	3.05		0.40	4.88		
			2	3.15		0.40	2.52		
	Entrance Steps		2	5.80		0.20	2.32		
			2	5.80		0.20	2.32		
			2	5.80		0.20	2.32		
			2	5.80		0.20	2.32		
	Entrance Steps Side		4	1.65		0.80	5.28		
		Sqm					**31.00**	**165.58**	5132.98
	Basic Rate	142.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-50.04	Note:- (0.02*1*1=0.02Cum/Sqm) (0.02*510*490.63/100)=50.04						
	Add Cement cost as per Issue rate	61.36	Note:- (0.02*510*300.78/50)=61.36						
	Sub Total	**153.31**							
	Area Weightage 8%	12.27							
	Total	**165.58**							
5	Filling avaialble excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20cms in depth compacting each deposited layers by ramming after watering with lead upto 50m and lift upto 1.5m including cost of all labour complete as per specification (Page No. 7 / Item No. 2.10 / PWD SR 2018-19)								
		Cum		**Qty as per It 1**			**44.60**	**217.08**	9682.20
	Basic Rate	201.00							
	Area Weightage 8%	16.08							
	Total	**217.08**							
6	KSRB 4.2.7: Providing and laying in position reinforced cement concrete cum of Design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70 cum and fine aggregtes @ 0.47cum, with super piasticisers @ 3 liters confirming to IS 9103-1999 reafirmed-2008 at machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspiliars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1,4.6 Specification No. KBS 4.1, 4.6. (Page No. 14, Item No. 4.12, PWD SR 2018-19)								

Sl. No		Unit	No	Dimension			Quantity	Rate	Amount
				L	B	D		in Rs.	in Rs.
			4	5.65	0.30	0.30	2.03		
			4	3.05	0.30	0.30	1.10		
			2	3.15	0.30	0.30	0.57		
		Cum					**3.70**	**6935.93**	**25656.02**
	Basic Rate	6045.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-1668.14	Note:- (340*490.63/100)=1668.14						
	Add Cement cost as per Issue rate	2045.30	Note:- (340*300.78/50)=2045.30						
	Sub Total	**6422.16**							
	Area Weightage 8%	513.77							
	Total	**6935.93**							
7	Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, for coping. Including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P. No.13/ I. No.4.6 of PWD SR 2018-19)							6442 644.2 7,086.2	174, 20.28
	For Ro Plant								
	Coping								
	For Steps		6	5.80	0.30	0.10	1.04		
			2	5.80	0.90	0.10	1.04		
		Cum					**2.09**	**6143.29**	**12827.19**
	Basic Rate	5422.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-1177.51	Note:- (240*490.63/100)=1668.14						
	Add Cement cost as per Issue rate	1443.74	Note:- (240*300.78/50)=1443.74						
	Sub Total	**5688.23**							
	Area Weightage 8%	455.06							
	Total	**6143.29**							
8	KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 - TMT bars Fe 500 (Page No. 18 / Item No. 4.46.2, PWD SR 2018-19)							136 13.1	83,780 8378 92,158
	Consider 95 kg/cum of concrete		2	3.70	95.00		702.81		
		Tonne					**0.70**	**84247.56**	**59210.03**
	Basic Rate	78007.00							
	Area Weightage 8%	6240.56							
	Total	**84247.56**							
9	Providing and removing centering shuttering strutting propping etc., and removal of form work for sides and soffits of beams beam houchings cantilever girders bressumers and lintels not exceeding 1m in depth including cost of all materials, labour complete as per specification (Page No. 17 / Item No. 4.34, PWD SR 2018-19)								
	For Ro Plant								
	For Plinth Beam								
			8	5.65		0.30	13.56		
			8	3.05		0.30	7.32		
			4	3.15		0.30	3.78		
		Sqm					**24.66**	**315.36**	**7776.78**
	Basic Rate	292.00							
	Area Weightage 8%	23.36							
	Total	**315.36**							

Sl. No		Unit	No	Dimension L	B	D	Quantity	Rate in Rs.	Amount in Rs.
10	Fabrication supplying and erecting M.S. tubular trusses of all spans as per approved drawing & design with prefabricated steel applications using quality material and are durable, reliable and corrosion and abrasion resistant. Welding shall confirm to latest structural welding code. Quality shall be on various parameters like shape, size, design gauge and polish. The entire trusses is anchored in RCC column by using 4 nos of M.S. anchor bolts at each support with 10mm thick t| base plate and shoe plate. The work includes cutting, straightening, placing in position of M.S. pipes and welding wherever necessary and applying one coat of redoxide primer coat to all the members including cost of all materials, labour charges, and hire charges of machineries for cutting, welding, grinding and erection equipments, with all lead and lift, transportation, letc., complete as per specification. (Item No.7.29, Page No.40, PWD SR: 2018-19)								
	For Ro Plant								
			No's	Length		Constant Kg/mtr			
	Verticle Bars								
	100X100X5mm thick		6	3.20		14.80	284.16		
	100X100X5mm thick		6	3.00		14.80	266.40		
	Horizontal Bars								
	100X100X5mm thick		8	3.20		14.80	378.88		
	100X100X5mm thick		8	5.80		14.80	686.72		
	Top								
	Verticle Bars								
	100X60X5mm thick		2	3.20		11.70	74.88		
	Horizontal Bars								
	100X60X5mm thick		2	5.80		11.70	135.72		
		Sqm					**1826.76**	**119.88**	218991.99
	Basic Rate	111.00							
	Area Weightage 8%	8.88							
	Total	**119.88**							
11	Providing and fixing self-supported, ribbed, high quality, high grade (D:350 MPA Yst Min), pre-painted Galvalume steel roof sheet, coated with bare Galvaiume coating A Z 150, @ 150 gms/Smtr 55%AL,45%Zn) by hot dip process, of total coated thickness as specified for different spans with a tolerance of +/- 0.02 mm, according to technical specification confirming to A 792, with NCCA 11-1, or ECCA T4 Pencil hardness HB, NCCA standard T-Bend test. The roof should be fastened to the gutter beam, on the external sloping side, at an interval of 51mm Centre to Centre,to a depth of 65 mm with Gl anchor bolts and neoprene washers & subjecting the gutter beam to Schmidt, Hammer test to ensure the anchorage of the anchor bolts. The self-supported roofing system should be designed to with stand the wind load (As per IS 875 part-3) & Earthquake load (as per IS 1893) & the design should also comply with any other technical requirements such as turbo ventilators of 0.60 mts. dia and skylights of size 4.26 x 0.60 mts. fixed one in each row @ 10.00 Mtr C/C along the length & hangers for electrical fixtures as per the requirements including cost of all materials &iabour for erection, all lead and lift, loading and unloading, HOM of machineries etc., complete as per the standard detailed technical (a) Span :Above 27 Meters upto 30 Meters (b) Material Specification: Colour Coated Imported Galvalume Sheet, weighing 17.63 kg/sqm BMT: 1,40 MM, APT: 1.47 MM, tolerance 0.02mm specification, design and directions of the engineer in charge of the work.**(Page No. 311, It No. 38.46.7 of KPWD S.R 2018-19)**								
	RO Plant								
	Wall								
	Right Side								
	Left Side		2	5.80		3.20	37.12		
	Back Side		2	5.80		3.00	34.80		
			4	3.20		3.10	39.68		
	Front								
	Front Top		2	1.50		3.00	9.00		
	Roof		6	3.20		0.60	3.84		
			2	6.00	4.00		48.00		
		Sqm					**172.44**	**2359.80**	406923.91
	Basic Rate	2185.00							
	Area Weightage 8%	174.80							

Sl. No		Unit	No	Dimension			Quantity	Rate	Amount
				L	B	D		in Rs.	in Rs.
	Total	**2359.80**							
12	KSRB 7.5 : Providing and fixing pull and push type rolling shutters of approved make out of 18 guage, 75mm wide cold rolled steel laths of convex corrugation, with side guides and bottom rail, with interlocking arrangements for steel laths by means of alternate clips; suspension shaft with High tension coil type springs two numbers, mounted on specially designed pipe shaft, with bracket plates, guide channels, ball bearing arrangements, for inside & outside locking with push & pull operations complete including pulling hooks, 4Nos. handles with all fittings and accessories, painted with a coat of red lead paint (without top cover) cost of materials, labour, HOM of machinery complete as per specifications. Shutter size 3mx2.8 m Specification No. KBS 7:107 7.12 (Page No.33, It No.7.5, of KPWD S.R 2018-19)								
	RO Plant								
			2	2.50		2.50	12.50		
		Sqm					**12.50**	**2815.56**	**35194.50**
	Basic Rate	2607.00							
	Area Weightage 8%	208.56							
	Total	**2815.56**							
13	KSRB 7.6 : Providing and fixing top covers made out of 20 guage M.S. sheet over pull and push rolling shutters bent to shape including cost of red lead primer coat of painting , materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 7.10.6 / 7.12 (Page No.34, Item No.7.6 of PWD SR 2018-19)								
	RO Plant								
			2	2.50			5.00		
		Mtr					**5.00**	**520.56**	**2602.80**
	Basic Rate	482.00							
	Area Weightage 8%	38.56							
	Total	**520.56**							
14	Providing 20mm thick cement plaster in single coat with cement mortar 1:3, to stone masonry & concrete surface including rounding off corners wherever required smooth rendering,: Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications (Page No116, Item No.15.18 PWD SR 2018-19)								
	OutSide								
	Alround R O Plant								
			2	18.00		0.40	14.40		
	For Steps		6	5.80		0.50	17.40		
			2	5.80	0.90		10.44		
		Sqm					**42.24**	**324.34**	**13700.12**
	Basic Rate	289.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-50.04	Note:- (0.02*1*1=0.02Cum/Sqm) (0.02*510*490.63/100)=50.04						
	Add Cement cost as per Issue rate	61.36	Note:- (0.02*510*300.78/50)=61.36						
	Sub Total	300.31							
	Area Weightage 8%	24.03							
	Total	**324.34**							
5	Providing and laying flooring using prepolished, water cut/gang saw 19mm thick granite laid over bed of 20mm thick 1:4 cm & jointed with neat cement slurry mixed with pigment to mach shade of granite slabs including laying POP on finished surface and cleaning the surface, including the cost of all materials and labours etc., complete as per specifications. - using silver grey granite / Multy Red / Ruby Red / Black / HassanGreen Granite of width not less than 900mm (P.No.110, I.No.14.47.2 of PWD SR 2018-19)								
	R O Plant								
	Flooring								
	For Steps		2	5.80	3.20		37.12		
			6	5.80		0.50	17.40		
			2	5.80	0.90		10.44		
		Sqm					**64.96**	**2609.75**	**169529.04**
	Basic Rate	2408.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-37.29	Note:- (0.02*1*1=0.02 cum/Sqm) (0.02*380*490.63/100)=37.29						

Sl. No		Unit	No	Dimension L	B	D	Quantity	Rate in Rs.	Amount in Rs.
	Add Cement cost as per Issue rate	45.72	Note:- (0.02*380*300.78/50)=45.72						
	Sub Total	**2416.43**							
	Area Weightage 8%	193.31							
	Total	**2609.75**							
16	KSRB 7.15 : Providing, fabricating, assembling and fixing in position aluminium partitions using aluminium sections of mat finish or glassy finish in combination of plain grove, single grove and double grove as per requirements for the frames of overall size 63.5mm x 38.1 mm. with thickness of 2mm. having section weight, plain sections 1.054kg/m, single grove thickness 1.95mm. section weight 1.094kg/m» double grove thickness 1 9mm section weight 1.094kg/m and bottom member 114.3 mm. x 44.45mm. thickness 3.18mm. weight 2.646 kg/m; aluminium louvres section of size 36. 5mmx34.93mm 1.45mm. thick section weight 0.429kg/m; bottom portions provided with 12mm. thick prelaminated sheet both sides of approved colour lamination exterior grade upto G.9m height, spacing of vertical member not exceeding 0.6 m. c to c; sections are cut to the required lengths, joints mitered and corners grinded subdividing frames tennoned and rivetted to the frames; the assembled frame stiffened with corner angles, stripped and fixed with screws, raw! plugs and teak wood gutties to R.C.C.columns on sides, R.C.C. lintels or beams at top and floor at bottom, including cutting chistelling and making good with cement mortar to match the surface; providing and fixing 5.5mm. thick plain glass for middle portion viz., fr.9m. to 2.13 m. and top panel with louvres sections; the glass and panels fitted with glazing clips of 19mmx17.3mm. of thickness 0.9mm. weight 0.124kg/m, aluminium sections treated for removal of any rust and prevention of further rust formation, coated with greasy materials for non-adherence of mortars or any other sticky materials; vertical members embedded in the flooring by making suitable sized holes and fixing with cement mortar, with necessary opening for fixing of door of standard size (excluding cost of door) all the frame thoroughly cleaned, free from rust, scale or dirt including cost of materials, fixtures, labour and HOM of machinery complete as per specifications.using aluminium section powdered coated to a minimum of 60-70 microns with exterior durable pure polyester grade powder of approved quality.(P.No.38, I.No.7.15.1 of PWD SR 2018-19)								
	R O Plant								
	Room		2	2.10		2.70	11.34		
		Sqm					**11.34**	**3633.12**	41199.58
	Basic Rate	3364.00							
	Area Weightage 8%	269.12							
	Total	**3633.12**							
17	KSRB 7.17 : Providing, fabricating, assembling and fixing in position aluminium doors using following aluminium mat finish or glossy finish, outer frame plain section 101.6x44.45mm thickness 3.18mm, section weight 2.404 kg/m, door shutters vertical section 44.62x44.45mm thickness 3.18mm, section weight 1.505kg/m, top section 47.62x44.45mm thickness 3.00mm, section weight 1.426kg/m bottom section 114.3x44.45 thickness 3.18mm, section weight 2.646kg/m, door central section 49.91x44.45mm thickness 3.00mm, section weight 1.495 kg/m glazing clips 19x17.3x11mm thickness 0.9mm section weight 0.124kg/m; aluminium sections cut to length joint metred cornersgrinded, the shutters pivoted opening arrangement with heavy duty aluminium alloy automatic door closures floor mounted, providing and fixing standard approved accessories, such as aluminium handle for full width or length, tower bolts, lock, pivots: P.V.C. or rubber gasket with 5.5m. thick plain glass for top and bottom panel; aluminium sections treated for removal of any rust and prevention of further rust formation, and coated with greasy materials for non-adherance of mortars or any other sticky materials; the assembled frame fitted with the corner angles, strips and fitted with screws, rawl plugs or teakwood gutties to R.C.C. columns or masonry on sides. beams and flooring in bottom. including cutting, chistling and making good with cement mortar to match the surface; all the frames throughly cleaned free from rust, scale, or dirt including cost of materials, fixtures, labour and HOM of machinery complete as per specifications.using aluminium section anodized to 12 - 15 microns.**(I.tm No.7.17.1, P.No.39, SR:2018-19)**								
	For Ro Plant								
	Door		2	0.90		2.10	3.78		
		Sqm					**3.78**	**6621.48**	25029.19
	Basic Rate	6131.00							
	Area Weightage 8%	490.48							
	Total	**6621.48**							

Sl. No		Unit	No	Dimension			Quantity	Rate in Rs.	Amount in Rs.
				L	B	D			
18	KSRB 15-18.1 : Applying red lead ready mix priming coat over new steel or other metal surface including preparing the surface after throughly cleaning oil, grease, dirt and other foreign matter, and scoured with wire brushes, fine steel wool, sand papers including cost of materials, labour, complete as per specifications.(P.No- 121,lt. No-15.73 of KPWD S.R 2018-19)								
	RO Plant								
	Rolling Shutter		4	2.50		2.50	25.00		
			2	2.50		0.80	4.00		
	Verticle Bars								
	100X100X5mm thick		6	3.40		0.40	8.16		
	100X100X5mm thick		6	3.20		0.40	7.68		
	Horizontal Bars								
	100X100X5mm thick		8	3.20		0.40	10.24		
	100X100X5mm thick		8	5.80		0.40	18.56		
	Top								
	Verticle Bars								
	100X60X5mm thick		2	3.20		0.32	2.05		
	Horizontal Bars								
	100X60X5mm thick		2	5.80		0.32	3.71		
		Sqm					**79.40**	**44.28**	**3515.83**
	Basic Rate	41.00							
	Area Weightage 8%	3.28							
	Total	**44.28**							
19	KSRB 15-18.2 : Providing and applying enamel metal paint two coats (excluding priming coat) over new steel or other metal surface brushing to give an even shade after cleaning oil, grease, dirt and other foreign matter, including cost of materials, labour, complete as per specifications.(P.No-121,lt. No-15.74 of KPWD S.R 2018-19)								
				Qty vide item No.16			79.40		
		Sqm					**79.40**	**102.60**	**8146.44**
	Basic Rate	95.00					93	85	
	Area Weightage 8%	7.60					8.10	8.5	
	Total	**102.60**						93.5	
20	Water purification plants: Supplying, Installation andCommissioning of automatic Water purification plant (RO+UF)with all accessories piping, product water tank on single phase power supply on Turnkey/EPC Basis as per the enclosed detailed Technical Specifications including cost of material, loading and unloading and as directed by the Engineer in charge.**1000 LPH SS** (P.No.120, I.No.14.01(h) of RWS SR 2018-19)								
			2				2.00		
		Nos					**2.00**	**400000.00**	**800000.00**
	Basic Rate	400000.00							
21	Additional price for installation of Ultra Voilet System								
			2				2.00		
		Nos					**2.00**	**10000.00**	**20000.00**
	Basic Rate	10000.00							
22	KSRB 13-11.1 : Providing and placing on terrace, polyethylene water storage tanks with manhole lid and suitable locking arrangements, making holes of suitable diameter for inlet, outlet and over flow pipes, including cost of all materials, labour, transport charges, HOM of equipments and testing complete as per specifications.(For 1000 litre capacity) Specification No.KBS 13.22 (P.No.96, I.No.13.78 of RWS SR 2018-19)								
			2				2.00		
		Nos					**2.00**	**7374.24**	**14748.48**
	Basic Rate	6828.00							
	Area Weightage 8%	546.24							
	Total	**7374.24**							

Sl. No		Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
23	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement & the cost of cutting chases & making good the same including testing of joints complete. (Concealed work including cutting chases and good the walls etc.) - **20mm nominal OD pipes. (P.No.96, I.No. 13.86.2 of PWD SR 2018-19)**								
			2	30.00			60.00		
		Mtr					**60.00**	**253.80**	15228.00
	Basic Rate	235.00							
	Area Weightage 8%	18.80							
	Total	**253.80**							
24	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement & the cost of cutting chases & making good the same including testing of joints complete. (Concealed work including cutting chases and good the walls etc.) - **25mm nominal OD pipes(P.No.96, I.No. 13.86.3 of PWD SR 2018-19)**								
			2	20.00			40.00		
		Mtr					**40.00**	**316.44**	12657.60
	Basic Rate	293.00							
	Area Weightage 8%	23.44							
	Total	**316.44**							
25	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement & the cost of cutting chases & making good the same including testing of joints complete. (Concealed work including cutting chases and good the walls etc.) - **32mm nominal OD pipes(P.No.96, I.No. 13.86.4 of PWD SR 2018-19)**								
			2	20.00			40.00		
		Mtr					**40.00**	**403.92**	16156.80
	Basic Rate	374.00							
	Area Weightage 8%	29.92							
	Total	**403.92**							
	Electrical Works								
26	Supplying heavy gauge PVC conduit pipe .....dia mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall / stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws.19/20mm dia 2mm thick(P.No-2 ,I No-1.1.1 of Electrical PWD S.R 2019-20)								
	PVC conduit pipe 9/20mm	**Mtrs**	2	40.0			**80.00**	**50.00**	4000.00
27	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:confirming to latest amendments (P.No-5 ,I No-2.3 of Electrical PWD S.R 2019-20)								
	1.5 Sqmm	**Mtrs**	2	70.00			**140.00**	**20.50**	2870.00
	2.5Sqmm	**Mtrs**	2	50.00			**100.00**	**32.00**	3200.00
	4.0Sqmm	**Mtrs**	2	20.00			**40.00**	**45.00**	1800.00
28	Supplying and wiring adopting loop system in existing PVC Conduit /casing capping casing capping using 2x1.5Sqmm (Phase & Neutral) & 1x1.0 sqmm (Earth wire) FRLS multi strand PVC insulated copper wire (confirming to IS-694: and latest amendments) without control switch shall be fixed on the existing plastic sheet/ gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block. complete for each outlet. (I No-2.2 Pg No. 5 of PWD S.R 2019-20)								

Sl. No		Unit	No	Dimension			Quantity	Rate	Amount
				L	B	D		in Rs.	in Rs.
	Short point upto 3Mtr from tapping point to out let via switch box	**Points**	8				**8.00**	**160.00**	**1280.00**
	Medium point above 3Mtr upto 6Mtr from tapping point to out let via switch box	**Points**	4				**4.00**	**250.00**	**1000.00**
	Long point above 6Mtr upto 10Mtr from tapping point to out let via switch box	**Points**	2				**2.00**	**375.00**	**750.00**
29	Supplying and flush mounting powder coated / galvanized metal box suitable for mounting modular switch plates. The box should be firmly flush mounted after due groove cutting in Brick/Stone/C.C wall. . (Page No -9, I No-3.4 of electrical PWD S.R 2019-20)								
	1-3Way	**No's**	6				**6.00**	**95.00**	**570.00**
	16-18Way	**No's**	4				**4.00**	**180.00**	**720.00**
30	Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/PVC box. (Page No -9, I No-3.5 of electrical PWD S.R 2019-20)								
	1 to 3 Module	**No's**	6				**6.00**	**110.00**	**660.00**
	16-18 Module	**No's**	4				**4.00**	**270.00**	**1080.00**
31	Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293. (Page No - 10, I No-3.6 of electrical PWD S.R 2019-20)								
	6Amps one way Switch (I No-3.6.1)	**Each**	4				**4.00**	**70.00**	**280.00**
	6Amps 3way socket (I No-3.6.3)	**Each**	4				**4.00**	**105.00**	**420.00**
	16Amps one way switch (I No-3.6.8)	**Each**	4				**4.00**	**115.00**	**460.00**
	6/16Amps universal socket (I No-3.6.11)	**Each**	6				**6.00**	**162.00**	**972.00**
	1000-1200Watts Dimmer (I No-3.6.7)	**Each**	12				**12.00**	**550.00**	**6600.00**
32	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.6-32 Amps DP (Page No -27, I No-5.17.4 of electrical PWD S.R 2019-20)								
		Each	4				**4.00**	**909.00**	**3636.00**
33	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia (I No-6.1, Page no.17 of Electrical PWD S.R 2019-20)								
		No	4				**4.00**	**2999.70**	**11998.80**
34	SSupplying & fixing of Porcelain fuse channel with cut outon existing wooden/panel using necessary nuts, bolts and washers. 16Amps(I No-5.7.1, Page no.24 of Electrical PWD S.R 2019-20)								
		Each	2				**2.00**	**117.00**	**234.00**

Sl. No		Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
35	Supplying & Fixing retrofit type -PL- LED lamp..... W LED Linear source with CCT 6500 degree K, CRI> 70%. Efficacy >80 lumen per watt, life> 25000 burning hours and Compliance to IS 10322/IEC 60598, LM 79 & LM 80. The LED are driven by HF electronic diver integrated in the system, with PF > 0.95, Power loss should < 5% of lamp wattage., short circuit & open circuit protection to be integrated in the circuit, THD less than 20%, life as per LM 79. The operating input voltage should be between 130 to 275 volts. Tested by NABL/CPBI accredited laboratory with 2years Warranty against any manufacturing defect working under standard electrical.**18-20 Watts**.(Page No.64, Item No.12.2 , PWD Electrical SR 2019-20)								
			10				10.00		
		Nos					**10.00**	**425.00**	4250.00
36	Fixing all types and all capacities of fluorescent / false ceiling / spot light / CFL / LED fittings indoor on the wall / ceiling / rafters / girders using 23/0.0076" twin twisted PVC insulated wires, required Nos of round blocks and clamps.On wall / ceiling / Rafter / Girders(Page No.79, Item No.14.7.1 , PWD Electrical SR 2019-20)								
			10				10.00		
		Nos					**10.00**	**110.00**	1100.00
37	Providing and fixing of 50mm G.I pipe 'C' class heavy duty for erection of submersible pumpset galvanised tube 50mm supply ad delivary of cause heavy duty as per IS/239/1990 (P No.XLVII, SL.No 01) PWD SR 2018-19								
		Mtrs	1	300			**300.00**	**439.90**	131970.00
	Basic Rate	415.00							
	Area Weightage 6%	24.90							
	Total	439.90							
38	Supplying and Drawing 3 core Flat PVC Shalted **Submersible Pump Cable** Manufactured with Electrolytic Grade Copper with Flexible copper conductor to table 3 class 5 of IS 8130-1984 and Virgen PVC insulation and Sheeated Suitable for working Voltage Upto 1100 Volts BWSSB SR 2014-15, P- 535, I. 30Page no:12 sl no: 2.10.4								
		Mtrs	1	600.00			600.00		
							600.00	164.29	98574.00
39	Supplying and delivery at site brand new star / Essen / Lotus / Sun shines / Adharsh / GK Controls best indigenous make combined energy meter cum control panel board unit of size 1200x600x350mm minimum mechanically strong vermin and water proof. The unit shall have two detachable doors suitable for opration on 3ph, 50 hz, 380/440 volts, AC supply with spring loaded latch, locking device with a key ribs should be provided inside the door canopy apron and louvers ventilators shall be provided the combined energy meter cum control panel board unit suitable for operation on 3ph, 50 hz, 380/440 volts AC supply shall be consists etc., complete the panel board shall be consist etc., complete the panel board shall be fabricated on single unit in the above componenets panel board for suitable pumpset with star delta staretr out door type 10hp to 15 hp PRED ISSUE RATE								
		Nos	10	1			10.00	14800.00	148000.00
40	Fabricating Supplying and mounting MS Box of 16 SWG suitable for floor/ wall mounting fully weather proof with provision for better hear description, 9Providing with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamp with necessary cable entry pipe with gland and box should be finished 2 coats of red oxide primes paint and finally finished with approved colour enamelled metal paint etc., complete box of 21600 Sq cm (P.No.530, I.No.39, BWSSB SR 2013-14)								
		Sqm	10	1100.00	20.00		220000.00	0.35	76956.00
	Basic Rate	0.33							
	Area Weightage 6%	0.02							
	Total	**0.35**							

Sl. No		Unit	No	Dimension L	B	D	Quantity	Rate in Rs.	Amount in Rs.
41	Earthwork excavation for foundation of buildings water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications. specification. Noll KBS 2.1.C/2.9.4/2.18/2.19 (Pg. No-06, I.No-2.4)PWD - SR 2018-19)								
		Cum	1	518.00	0.60	0.75	233.10		
							233.10	475.94	**110942.00**
	Basic Rate	449.00							
	Add Area Weightage 6%	26.94							
	Total	**475.94**							
42	KSRB 13.9: Providing and fixing to wall, ceiling and floor high density polyethylene pipes 6.00 kgf/sq.cm working pressure of outside diameter raising mains & exposed distribution pipes with special flange, compression type fittings, wall clips, making good the wall, ceiling and floor, including cost of all materials, labour charges, HOM and testing complete as per specifications. 63MM dia Specification No KBS 13.2.15.2 (Page no:96, I.No.13.73.2 PWD SR 2018-19).								
		Rmt	1	518.00			518.00		
							518.00	394.32	**204258.00**
	Basic Rate	372.00							
	Add Area Weightage 6%	22.32							
	Total	**394.32**							
43	KSRB-2-4: Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 1.5m including cost of all labour complete as specifications.. allow 60% of rate considered under item KSRB 2.3 Page No. 7/ Item No. 2.11/PWD - SR 2018-19)								
		Cum	1	518.00	0.60	0.75	233.10	128.26	**29897.00**
	Basic Rate	121.00							
	Add Area Weightage 6%	7.26							
	Total	128.26							
								Total Constrution cost	**3017101.08**
								GST Charges 12%	**362052.13**
								Tender Premium 5%	**120684.04**
								Sub Total	**3499837.25**
								Miscellaneous & Rounding Off	**162.75**
								Grand Total	**3500000.00**
	Rupees Thirty Five Lakhs Only								

rtificate:-

This Work Comes Within BBMP Limits.

Certified that personaly Inspected the Work Spot.

Certified that the Estimate is Prepared Based on CSR of PWD Bangalore Circle 2018-19 and Issue Rates from 01-02-2021

Estimate is Prepared Making Use of essential itemof work as per site conditions in safest way of Execution in most economical way

This work is not include in any other program of work.

Assistant Engineer
Bagalagunte Ward 14

Assistant Executive Engineer
T.Dasarahyalli Sub Division

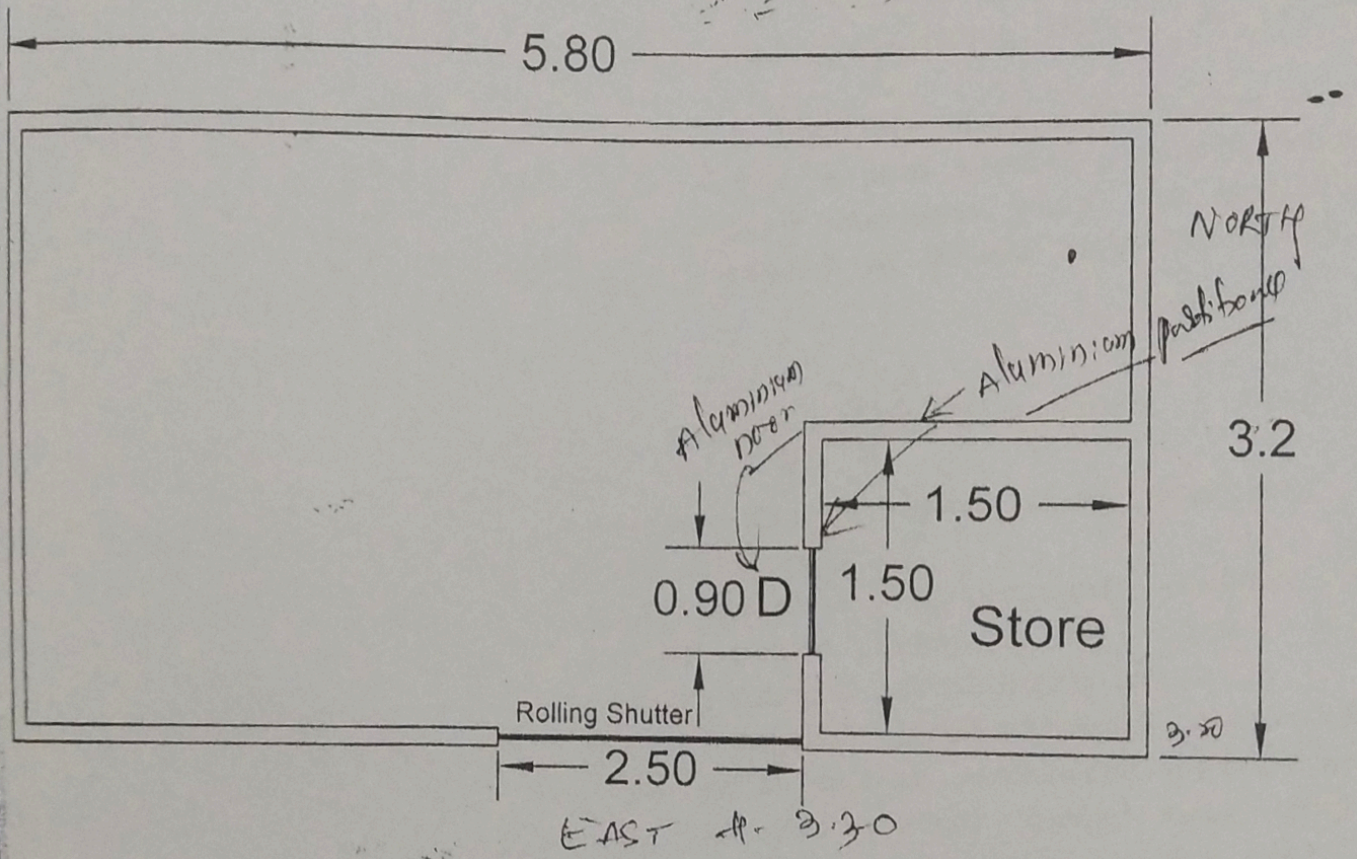
Executive Engineer
Dasarahalli Division

ADMINISTRATIVELY SANCTIONED FOR
(Rupees Thirty five lakh only
Under the Head of Account P-1802
Water supply New Areas.
Registered as no EE(D.D.)/AS 41/2021 Subject to conditions contained in Enclosed Memo
No EE/DD/A1/41/21-22 Dt: 30-11-2021
JE/AE. Exe. E (DASARAHALLI, SE)

Technically Sanctione for Rs. 35.00 Lakhs
Rs. In words Rupees Thirty five Lakhs only
Under P-1802
Job Code No 014-21-000020
Registered as CE No. 74/14-01-2022 Subject to conditions contained in Enclosed Memo
No EE/DZ/TS/74/2021-22 Dt: 14-01-2022
AE/JE. TA CE(D)

Name of Work:- Construction of RO Plant in Ward No.14

RO Plant Plan



Assistant Engineer
Ward No.1

Assistant Executive Engineer
Sub Division

All Dimensions are in Meters